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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/637,190	08/08/2003	Curt Dale Haffner	PU3616US2	5880	
23347	7590 04/16/2004	•	EXAM	EXAMINER	
DAVID J LEVY, CORPORATE INTELLECTUAL PROPERTY GLAXOSMITHKLINE FIVE MOORE DR., PO BOX 13398 RESEARCH TRIANGLE PARK, NC 27709-3398			ANDERSON,	REBECCA L	
			ART UNIT	PAPER NUMBER	
			1626		

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/637,190	HAFFNER ET AL.			
		Examiner	Art Unit			
		Rebecca L Anderson	1626			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
THE   - External after - If the - If NC - Failur Any I	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. msions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	16(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1) 🗌	Responsive to communication(s) filed on					
2a)☐	This action is <b>FINAL</b> . 2b) ☑ This action is non-final.					
3)∐						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5) 6) 7)	Claim(s) 12,13,15,16,20 and 21 is/are pending 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) is/are rejected. Claim(s) is/are objected to. Claim(s) 12, 13, 15, 16, 20 and 21 are subject to	vn from consideration.	irement.			
Applicati	on Papers					
•	The specification is objected to by the Examiner					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	The oath or declaration is objected to by the Ex		* *			
Priority u	nder 35 U.S.C. § 119					
a)[	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priori application from the International Bureau ee the attached detailed Office action for a list of	have been received. have been received in Application ty documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage			
Attachment						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) ∐ Interview Summary ( Paper No(s)/Mail Dat				
3) 🔲 Inform	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date	5) Notice of Informal Pa 6) Other:				

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### **DETAILED ACTION**

Claims 12, 13, 15, 16, 20 and 21 are currently pending in the instant application and are subject to the following restriction.

#### Election/Restrictions

The instant claims include both independent and distinct inventions, and contain patentable distinct compounds (or species) within each invention. However, this application discloses and claims a plurality of patentable distinct inventions far too numerous to list individually. Moreover, each of these inventions contains a plurality of patentable distinct compounds, also far too numerous to list individually. For these reasons provided below, restriction to one of the following Groups is required under 35 U.S.C. 121, wherein a Group is a set of patentable distinct inventions of a broad statutory category (e.g. compounds, methods of use, methods of making, etc.):

- I. Claims 12 and 13 drawn to methods of increasing I-BABP expression in a mammal comprising administering an effective amount of a non-steroidal Farnesoid X receptor agonist to said mammal classified in various subclasses of class 514.
- II. Claims 15 and 16 drawn to methods of increasing bile acid transport from the intestinal lumen across the intestinal membrane in a mammal which comprises administering an effective amount of a non-steroidal Farnesoid X Receptor agonist to said mammal classified in various subclasses of class 514.
- III. Claim 20 dran to a method of lowering serum triglycerides in a mammal comprising administering to a mammal in need of such treatment an effective serum

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triglyceride lowering amount of a non-steroidal agonist for Farnesoid X Receptor classified in various subclasses of class 514.

IV. Claim 21 drawn to a method of treating obesity in a mammal in need of such treatment, comprising administration of a therapeutically effective amount of a non-steroidal FXR agonist classified in various subclasses of class 514.

In accordance with the decisions in *In re Harnisch*, 631 F.2d 716, 206 USPQ 300 (CCPA 1980); and *Ex parte Hozumi*, 3 USPQ2d 1059 (Bd. Pat. App. & Int. 1984), restriction of a Markush group is proper where the compounds within the group either (1) do not share a common utility, or (2) do not share a substantial structural feature disclosed as being essential to that utility. In addition, a Markush group may encompass a plurality of independent and distinct inventions where two or more members are so unrelated and diverse that a prior art reference anticipating the claim with respect to one of the members would not render the other member(s) obvious under 35 U.S.C. 103.

Where an election of any one of Groups I-IVis made, an election of a single compound (a single non-steroidal Farnesoid X receptor agonist, such as GW4064) is further required including an exact definition of each substitution on the base molecule (Formula (I)), wherein a single member at each substituent group or moiety is selected. For example, if a base molecule has a substituent group R1, wherein R1 is recited to be any one of H, OH, COOH, aryl, heteroaryl, alkoxy, halogen, amino, etc., then applicant must select a single substituent f R1, for example OH, phenyl, pyrazole, etc., and each subsequent variable position. In the instant case,

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upon election of a single compound, the Office will review the claims and disclosure to determine the scope of the independent method invention encompassing the elected compound (compounds which are so similar thereto as to be within the same inventive concept and reduction to practice). The scope of an independent method invention will encompass all compounds within the scope of the claim, which fall into the same class and subclass as the elected compound, but may also include additional compounds which fall in related subclasses. Examination of the method invention will then proceed on the elected compound AND the entire scope of the invention encompassing the elected compound as defined by common classification. A clear statement of the examined invention, defined by those class(es) and subclass(es) will be set forth in the first action on the merits. Note that the restriction requirement will not be made final until such time as applicant is informed of the full scope of compounds in the method invention. This will be set forth by reference to specific class(es) and subclass(es) examined. Should applicant traverse on the ground that the compound are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the compound to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other.

All method inventions comprising compounds falling outside the class(es) and subclass(es) of the selected compound and any other subclass encompassed by the election above will be directed to nonelected subject matter and will be withdrawn from

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consideration under 35 U.S.C. 121 and 37 C.F.R. 1.142(b). Applicant may reserve the right to file divisional applications on the remaining subject matter. (The provisions of 35 U.S.C. 121 apply with regard to double patenting covering divisional applications.)

Applicant is reminded that upon cancellation of claims to a nonelected invention, the inventions must be amended in compliance with 37 C.F.R. 1.48(b) if one of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 C.F.R. 1.48(b) and by the fee required under 37 C.F.R. 1.17(i).

If desired upon election of a single compound, applicants can review the claims and disclosure to determine the scope of the invention and can **set forth** a group of method inventions comprising compounds which are so similar within the same inventive concept and reduction to practice. Markush claims must be provided with support in the disclosure for each member of the Markush group. See MPEP 608.01(p). Applicant should exercise caution in making a selection of a single member for each substituent group on the base molecule to be consistent with the written description.

## Rationale Establishing Patentable Distinctiveness Within Each Group

Each Group listed above is directed to the use of compounds which are recognized in the art as being distinct from one another because of their diverse chemical structure, their different chemical properties, modes of action, different effects and reactive conditions (MPEP 806.04, MPEP 808.01). Additionally, the level of skill in the art is not such that one invention would be obvious over the other invention (Group), i.e. they are patentable over each other. Chemical structures which are similar are

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presumed to function similarly, whereas chemical structures that are not similar are not presumed to function similarly. The presumption even for similar chemical structures though is not irrebuttable, but may be overcome by scientific reasoning or evidence showing that the structure of the prior art would not have bee expected to function as the structure of the claimed invention. Note that in accordance with the holding of Application of Papesch, 50 CCPA 1084, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and In re Lalu, 223 USPQ 1257 (Fed. Cir. 1984), chemical structures are patentably distinct where the structures are either not structurally similar, or the prior art fails to suggest a

The above groups represent general areas wherein the inventions are independent and distinct, each from the other because of the following reasons:

function of a claimed compound would have been expected from a similar structure.

Inventions I-IV are independent and distinct methods of using various non-steroidal Farnesoid X Receptor agonist which differ materially in the products administered and the effects. These methods require compounds which are chemically recognized as having diverse chemical structures and proterties which result in different effects, such as the treatment of obesity or the increasing of I-BABP expression, which, therefore, causes these methods to be independent and distinct one from the other.

In addition, because of the plethora of subclasses in each of the Groups, a serious burden is imposed on the examiner to perform a complete search of the defined areas. Therefore, because of the reasons given above, the restriction set forth is proper and not to restrict would impose a serious burden in the examination of this application.

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A telephone call was made to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rebecca L. Anderson whose telephone number is (571) 272-0696. Mrs. Anderson can normally be reached Monday through Friday 5:30AM to 2:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Joseph McKane, can be reached at (571) 272-0699.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone numbers are (703) 308-1235 and (703) 308-0196.

A facsimile center has been established. The hours of operation are Monday through Friday, 8:45AM to 4:45PM. The telecopier number for accessing the facsimile machine is (703) 872-9306.

Patent Examiner

Art Unit 1626, Group 1620 Technology Center 1600

Joseph McKane

Supervisory Patent Examiner Art Unit 1626, Group 1620

Technology Center 1600